

EFFECT OF FOOT DIABETIC EXERCISE ON FOOT NEUROPATHY IN DIABETIC TYPE II NON ULCER PATIENT AT ENDOCRINE POLYCLINIC DR. WAHIDIN SUDIROHUSODO HOSPITAL MAKASSAR

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ABSTRACT

Introduction: The movement in foot diabetic exercise can be an alternative for patients with diabetes to improve blood circulation and neuropathy response to the legs. The aims of this study were to find out the effectiveness of diabetes foot exercise in lowering blood pressure and the its effecton neuropathy response in patients with diabetic type II. **Method:** The study used Quasi experiment: non-equevalent control group. 17 enrolled participants did foot diabetics exercise every week until six week as an intervention group and 17 enrolled participants did nothing as a control group. Data were analyzed using paired T- test. **Result:** The study showed that The mean of neuropathy response in the intervention group was $2.59 (\pm 0.795)$ and the control group of $4.59 (\pm 0.618)$, the results of Mann - Whitney showed p value = 0,000. A Change in the average neuropathy response in those who did diabetic foot exercise 6 week was occurred due to Insulin resistance reduction. Diabetic foot exercise can increase levels of Nitric Oxide. Nitric Oxide is a substance secreted by the endothelial cells of blood vessels as a powerful vasodilator for blood vessels (Salam, 2012). The mean reduction in systolic blood pressure in the intervention group was 125 mmHg (115-130) and the control group 130 mmHg (120-135) and unpaired t test results obtained $p = 0.071$ ($p > 0.05$). **Conclusion:** [Diabetic foot exercise is an effective method to improve neuropathy respon](#) and [lowering systolic blood pressure](#).

Key words : foot [exercise](#), neuropathy response, blood pressure, diabetic type II